

Age and Provenience of Adena Bone Combs

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There are eight known occurrences of Adena bone combs in Ohio (2), Kentucky (5), and Indiana (1), including that found in the original or "type" Adena Mound in Ross Co., Ohio. All have been found in burial association and represent a distinct albeit rare Adena trait, in contexts that have generally been considered late Adena.

The combs are usually found in the form of two rectangular pieces of wide, flat mammal bone which were apparently fitted together. In one instance (Lewis Mound), a small hole has been drilled in the corner of the comb. Along one edge of the combs 5 to 11 short teeth have been carved in the bone. Two combs (Wright Mound and Lewis Stone Mound) having 11 and 10 teeth respectively, appear to have been used separately. In all other instances the combs occur in pairs, the total number of teeth being from 10 to 18. Dimensions of the paired combs range from about 40 by 60 to 50 by 100 mm. Precise measurements are given in most of the original descriptions of these artifacts. No better interpretation of the function of these bone tools suggests itself than Webb's (1940) original idea that they were used for carding fiber.

Only one Adena site yielding these bone combs has been dated previously—one of the two Wright mounds, Montgomery Co., Kentucky. In an attempt to delimit the age of this peculiar bone artifact type, charcoal or bone samples were procured from three additional Adena mounds that have yielded bone combs and were radiocarbonated at Dicar Laboratories, Case Western Reserve University. Radiocarbon measurements and calculations were conducted by the junior author. These and other pertinent radiocarbon dates are presented in Table 1. We are grateful to Dr. James H. Kellar, Indiana University, for providing the human bone sample from the Lewis stone mound and to Dr. Eugenie C. Scott, University of Kentucky, for providing the human skeletal material from the Ricketts and Wright mounds.

If all of the dates presented in Table 1 are accepted, Adena bone combs were manufactured from 430 B.C. to A.D. 270, a period of some 700 years. None of the dates are

particularly suspect, although the Rock Riffle Run bone sample was badly contaminated with rootlets, which means that the real age of the sample might be even greater than 430 B.C. The radiocarbon dates, then, are admittedly disappointing, for we had hoped that the Adena bone comb would prove to be restricted to a relatively short time span within the late Adena Robbins complex.

Similarly long time spans, however, are evidenced for other "diagnostic" Adena Robbins traits. The semi-keeled and quadriconcave gorgets, for example, have been dated from 450 B.C. to A.D. 271. Mica crescents have been dated from 390 B.C. to A.D. 270. Some Robbins artifact types do appear to have more restricted temporal ranges—the expanded center bar gorget, for example, is known only from 150 B.C. to A.D. 20-40, and Montgomery Incised pottery is dated from 150 B.C. to A.D. 230. Of course, dates are so meager that these ranges may well be extended as additional dates are obtained. In general, the existing data do little more than indicate the limited usefulness of radiocarbon-dating in Adena studies, a frustrating fact commented upon by Dragoo (1963) in his analysis of Adena.

Considered individually, however, several of these dates on mounds yielding Adena bone combs are significant. The Rock Riffle Run date, for example, is only the second Adena date from the Hocking Valley and establishes the relative age of this mound and the somewhat younger Daines mound II. This in turn suggests that Dragoo (1963) was correct in his assumption (Murphy 1975) that the Daines mounds represent a terminal or decadent Adena later than "classic" Adena (as represented by the Rock Riffle Run mound). The C. L. Lewis stone mound date of A.D. 20-40 is also of significance, supporting as it does the thesis that the Lewis mound is a very late Adena component. (The Lewis mound contained a large chert blade similar to the Hopewellian Marshall Barbed type described by White (1968).) The Ricketts mound date needs no comment, but it should be noted that the Wright date of A.D. 270 dates the secondary mound, and the bone combs found in the Wright mound occurred in the tertiary

mound, which remains undated but is presumably somewhat younger than A.D. 270.

No attempt was made to radiocarbon date samples from the other two mounds that have yielded bone combs, the Wright mound 7 and the original Adena mound. In the instance of the Wright mound 7, its proximity to Wright mound 6 and the similarity of the suites of artifacts recovered from the two mounds suggest near contemporaneity. In the case of the original Adena mound, it has proven impossible to locate an adequate bone sample that can be attributed to it. Apparently, W. C. Mills shipped all of the osteological material to the U. S. National Museum. Douglas Ubelaker (pers. comm., Nov. 12, 1974) states that the Smithsonian files contain only Mills' 1925 letter of transmission, which indicates merely that "the weight of the skeletons will be in the neighborhood of 2000 to 2500 pounds, and are representative skeletons from a number of sites in Ohio. I have been preserving these skeletons for the last twenty years to send to the Museum . . ." Only one small lot of bones is labeled "Adena" and there is no way of determining in which layer of the Adena mound these were found. Ubelaker writes that "There are many skeletons that are labeled only as 'various mounds', which could represent the missing skeletons from the Adena mound but there appears to be no way to determine this for sure." It may also be noted that the otherwise accurate drawing of the Ross County, Ohio comb (Mills, 1902, p. 470) shows a vestigial tooth at one end, which has been reproduced by Dragoo (1963, p. 222), who inadvertently attributes this comb to the Wright mound; this tooth does not exist on the actual specimen (Fig. 1).

"Context" of the eight known Adena bone combs is given in Table 2. It seems clear that no consistent combination of artifact associations, physical age of burials, or form of burial or grave exists among the few known occurrences of these combs, unless the high incidence of male burials (4 of the 7 burials are male; sex of the other 3 has not been determined, including one child and one cremation) is significant. Lack of comb associations with female skeletons is considered fortuitous, however. Utilitarian objects are generally rare in association with Adena female burials and, indeed, except in the case of articles of personal adornment, masks, or "medicine bag" contents, it is often a moot point whether accompanying grave goods belonged to the buried individual or were actually the property of a family member who

placed them with the burial. Certainly it is unlikely that the bone comb accompanying the two year old infant buried in the Rock Riffle Run mound actually belonged to the child. More likely, it was placed in the grave by one of the parents.

In conclusion, Adena bone combs were probably manufactured for a period of at least 700 years. They cannot be used, therefore, as a narrow time marker, nor do they appear to be restricted geographically within Adena or to be useful as indicators of individual age, status, sex, or occupation. It is curious, however, that these distinctive Adena bone artifacts are nowhere mentioned in the 1970 Ball State University Aden symposium which attempted to define and refine Adena studies, for they are diagnostic of the late Adena (Early Scioto) Robbins Complex or Robbins Stage (Swartz 1972), though Swartz, apparently on the basis of radiocarbon dates, places the Wright site in his Middle Scioto phase.

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"Context" of Adena Bone Combs

Mound	Burial and Burial Type	Associated artifacts	Placement	Radiocarbon date
Adena mound, Ross Co., Ohio	Extended adult, subfloor, bark prepared, log covered; puddled clay; leg bones painted red	Cache blades, formal tablet, beaver incisors, bone awls, drilled mountain lion canines	"near right tibia"	none
Rock Riffle Run mound, Athens Co., Ohio	Extended child; 2 adults associated	<i>Marginella</i> beads at neck	between femora	430 B.C.
C. L. Lewis stone mound, Shelby Co., Indiana	Extended adult; 12 associated burials	Corner notched flint blade, copper beads with associated burial	at right hip	A.D. 20-40
Ricketts mound, Montgomery Co., Ky.	Burial 13, adult, log outline, bark prepared	Elbow pipe, <i>Lamp-silis</i> spoon, bone awls, spatulas, antler flaker, Adena Stemmed blade	at right hip	390 B.C.
	Burial 17, log, bark-covered; feet removed	Copper ring, bone drift, Bone awls, turtle and shell spoons, "arrow point"	near left shoulder	none
Wright mound 6, Montgomery Co., Ky.	Burial 8, adult, log box, bark prepared, puddled clay, tertiary mound	Bone comb, tubular stone pipes, bone spatulas, stone spatula	at right elbow	A.D. 270
Wright mound 7, Montgomery Co., Ky.	Burial 2, cremation on mound floor	Rectangular formal tablets; bone flaker		none

Table 1

Radiocarbon Dates on Adena Bone Combs

Mound	Provenience	Material	Radiocarbon Date	Corrected (MASCA)
Rock Riffle Run, Athens Co., Ohio	Burial 7	Human bone	440 B.C. 60	430 B.C.
Ricketts mound, Montgomery Co., Ky.	Burial 13	Human bone	308 B.C. 55	390 B.C.
C. L. Lewis stone mound, Shelby Co., Indiana	Burial 26	Human bone	80 B.C. 75	A.D. 20-40
Wright mound 6, Montgomery Co., Ky.	Burial 13	Charcoal	A.D. 210 140	A.D. 270

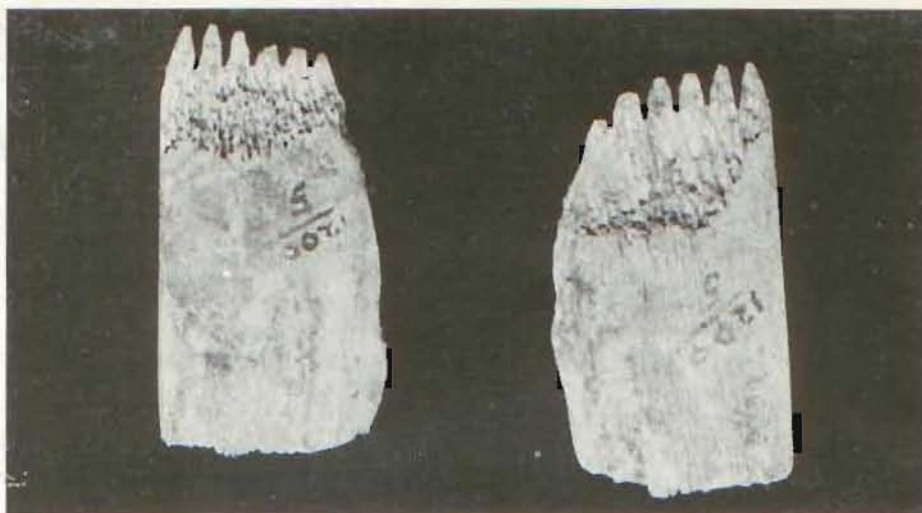


Fig. 1 Bone combs from the Adena mound, Ross Co., Ohio. The Ohio Historical Society, Columbus.



Fig. 2 Primary burial, Adena mound, Ross Co. Photo courtesy of Martha Otto. The Ohio Historical Society, Columbus.



Fig. 3 Close-up of primary burial cache, Adena mound, Ross Co., Ohio. Bone comb lying on edge, to right and above formal tablet and beaver incisors; bone awls lie on left tibia, cache blades at feet. The Ohio Historical Society, Columbus.



Fig. 4 Bone combs from Rock Riffle Run mound, Athens Co., Ohio.



Fig. 5 Bone combs from C. L. Lewis stone mound, Shelby Co., Indiana.

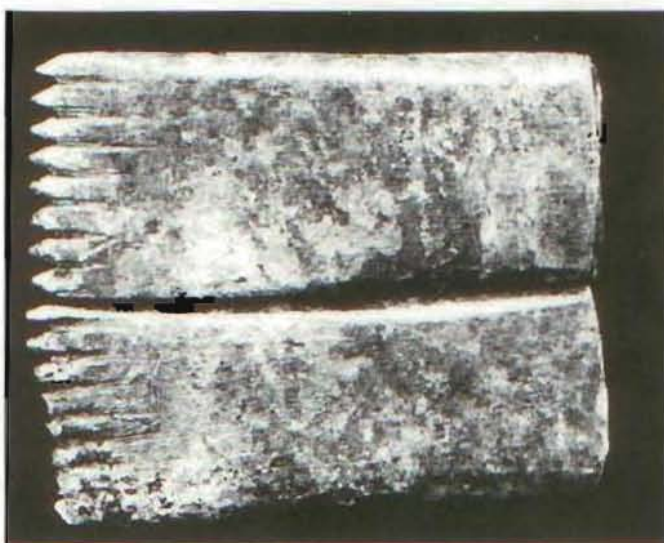


Fig. 6 Burials 13 and 14, Ricketts mound, Montgomery Co., Kentucky.



Fig. 7 Bone comb associated with Burial 13, Ricketts mound, Montgomery Co., Kentucky.